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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,531	12/02/2005	Yutaka Takeuchi	025416-00024	2704
4372	7590	03/12/2010	EXAMINER	
ARENT FOX LLP			ZHU, WEIPING	
1050 CONNECTICUT AVENUE, N.W.			ART UNIT	
SUITE 400			PAPER NUMBER	
WASHINGTON, DC 20036			1793	
			NOTIFICATION DATE	DELIVERY MODE
			03/12/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DCIPDocket@arentfox.com

IPMatters@arentfox.com

Patent_Mail@arentfox.com

**Advisory Action
Before the Filing of an Appeal Brief**

Application No. 10/559,531	Applicant(s) TAKEUCHI ET AL.
Examiner WEIPING ZHU	Art Unit 1793

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 04 March 2010 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
(b) ☐ They raise the issue of new matter (see NOTE below);
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.
NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5. ☐ Applicant's reply has overcome the following rejection(s): _____.

6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: _____.

Claim(s) objected to: _____.

Claim(s) rejected: 13 and 15-19.

Claim(s) withdrawn from consideration: 20-23.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: of the reasons as stated in the final rejections.

12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). _____

13. ☒ Other: See Continuation Sheet

/Roy King/
Supervisory Patent Examiner, Art Unit 1793

/Weiping Zhu/
Examiner, Art Unit 1793

Continuation of 13. Other: The proposed amendments to claim 13 and proposed cancellation of claim 14 filed by the applicant on March 4, 2010 have been entered. Claims 13 and 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (US 4,309,227) in view of JP 2000-045061 as stated in the Office action dated November 4, 2009. With respect to the amended features in claim 13, which are the same as the limitations recited in the cancelled claim 14, the reason for the rejection of the cancelled claim 14 as stated in the Office action dated November 4, 2009 has been further applied. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kajikawa et al. (US 4,309,277) in view of JP 2000-045061 as applied to claim 13 above and further in view of JP 09-079912 as stated in the Office action dated November 4, 2009.

The examiner has responded properly to all applicant's arguments in applicant's amendment filed on August 25, 2009 after the non-final Office action dated April 21, 2009. The following responses are to applicant's new arguments filed on March 4, 2010 in response to the final Office action dated November 4, 2009.

First, the applicant argues that the heat generated by the heating element of Kajikawa et al. ('227) cannot be higher than that in the first step when Kajikawa et al. ('227) clearly shows "the heat-radiating element output" as declined in Figures 3 and 4. In response, the examiner notes that the Fig. 4 of Kajikawa et al. ('227) clearly shows that at time t3, the glow discharge voltage is decreased and the heat-radiating element output is increased to maintain the nitriding temperature when the glow discharge voltage is low (col. 5, lines 1-12), which reads on the claimed feature. The heat-radiating element output levels and glow discharge voltages in the Figures 3 and 4 of Kajikawa et al. ('227) are only diagrammatic. The heat-radiating element output level at t3 would be higher than that in the first step because the glow discharge voltage is the highest in the first step and the lowest after time t3.

Second, the applicant argues that the examiner is attributing all of the increase in temperature to be due to the heating element. In response, the examiner notes that in response to applicant's 2nd argument in the final Office action dated November 4, 2009, the examiner clearly stated that Fig. 4 of Kajikawa et al. ('227) clearly shows at times t2 and t3 that the glow discharge voltage is decreased and that the heating of the workpiece up to the desired nitriding temperature is done by using a heating element and a glow discharge.

Third, the applicant argues that it is not obvious that the decrease in glow discharge voltage would have to be gradual since a step decrease (as shown in both Figs 3(B) and 4(B) of Kajikawa et al. ('227)) would not produce an abrupt decrease in heat input. In response, the examiner notes that the Figures 3 and 4 of Kajikawa et al. ('227) are only diagrammatic and the arguments of the counsel cannot be relied upon as evidence. See MPEP 2145 [R-6].

Fourth, the applicant argues that it is clear that Kajikawa et al. ('227) is not aware of the disadvantages of the glow discharge. In response, the examiner notes that Kajikawa et al. ('227) discloses a nitriding method using a combination of the glow discharge and the heating element for heating as instantly claimed as discussed above. Kajikawa et al. ('227) does not have to be aware of the disadvantages of the glow discharge.

Fifth, the applicant argues that the output of the heating element of Kajikawa et al. ('227) is clearly once reduced. In response, the examiner notes that the output of the heating element of Kajikawa et al. ('227) is clearly once increased as discussed above. The instant claim 13 does not exclude reducing the output of the heating element in the process.

Sixth, the applicant argues that the sample 1 as disclosed by JP ('912) (abstract) is only a simulation of the workpiece being treated. In response, the examiner maintains his position as stated in the final Office action dated November 4, 2009 that the sample 1 reads on the claimed dummy workpiece because JP ('912) clearly suggests a method to determine the real surface temperature of a workpiece by measuring the contact and radiation temperatures of a dummy disposed in an environment wherein the workpiece is disposed to derive at a temperature correction factor and correct the radiation temperature of the workpiece detected simultaneously with the correction factor as instantly claimed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Weiping Zhu whose telephone number is 571-272-6725. The examiner can normally be reached on 8:30-16:30 Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.